Ke-run

LHelros

RAW SEQUENCE LISTING

DATE: 10/15/2001

PATENT APPLICATION: US/08/908,469

TIME: 16:14:37

Input Set : A:\P1093pl.txt

Output Set: N:\CRF3\10152001\H908469.raw

SEQUENCE LISTING

```
5 (1) GENERAL INFORMATION:
      7
             (i) APPLICANT: Baca, Manuel
      8
                            Wells, James A.
      9
                            Presta, Leonard G.
     10
                            Lowman, Henry B.
                            Chen, Yvonne M.
     11
     13
            (ii) TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
     15
           (iii) NUMBER OF SEQUENCES: 131
     17
            (iv) CORRESPONDENCE ADDRESS:
                                                            ENTERED
     18
                  (A) ADDRESSEE: Genentech, Inc.
     19
                  (B) STREET: 1 DNA Way
     20
                  (C) CITY: South San Francisco
     21
                  (D) STATE: California '
     22
                  (E) COUNTRY: USA
     23
                  (F) ZIP: 94080
     25
             (v) COMPUTER READABLE FORM:
     26
                  (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
     27
                  (B) COMPUTER: IBM PC compatible
     28
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     29
                  (D) SOFTWARE: WinPatin (Genentech)
     31
            (vi) CURRENT APPLICATION DATA:
C--> 32
                  (A) APPLICATION NUMBER: US/08/908,469
                  (B) FILING DATE: 06-Aug-1997
C--> 33
                  (C) CLASSIFICATION:
     34
     36
           (vii) PRIOR APPLICATION DATA:
     37
                  (A) APPLICATION NUMBER: 08/833,504
     38
                  (B) FILING DATE: 07-APR-1997
     40
          (viii) ATTORNEY/AGENT INFORMATION:
     41
                  (A) NAME: Cui, Steven X.
     42
                  (B) REGISTRATION NUMBER: 44,637
     43
                  (C) REFERENCE/DOCKET NUMBER: P1093P1
     45
            (ix) TELECOMMUNICATION INFORMATION:
     46
                  (A) TELEPHONE: 650/225-8674
     47
                  (B) TELEFAX: 650/952-9881
     48 (2) INFORMATION FOR SEQ ID NO: 1:
     50
             (i) SEQUENCE CHARACTERISTICS:
     51
                  (A) LENGTH: 10 amino acids
     52
                  (B) TYPE: Amino Acid
     53
                  (D) TOPOLOGY: Linear
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
        Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
     57.
                           5
           1
     60 (2) INFORMATION FOR SEQ ID NO: 2:
     62
             (i) SEQUENCE CHARACTERISTICS:
     63
                  (A) LENGTH: 17 amino acids
```

(B) TYPE: Amino Acid

64

DATE: 10/15/2001

```
PATENT APPLICATION: US/08/908,469
                                                        TIME: 16:14:37
                Input Set : A:\Pl093pl.txt
                Output Set: N:\CRF3\10152001\H908469.raw
             (D) TOPOLOGY: Linear
65
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
67
    Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
69
70
    1
72 Lys Arg
75 (2) INFORMATION FOR SEQ ID NO: 3:
        (i) SEQUENCE CHARACTERISTICS:
78
             (A) LENGTH: 14 amino acids
79
             (B) TYPE: Amino Acid
80
             (D) TOPOLOGY: Linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
82
    Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
                                         10
87 (2) INFORMATION FOR SEQ ID NO: 4:
89
        (i) SEQUENCE CHARACTERISTICS:
90
             (A) LENGTH: 11 amino acids
91
             (B) TYPE: Amino Acid
92
             (D) TOPOLOGY: Linear
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
   Ser Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn
99 (2) INFORMATION FOR SEQ ID NO: 5:
       (i) SEQUENCE CHARACTERISTICS:
101
              (A) LENGTH: 7 amino acids
102
103
              (B) TYPE: Amino Acid
104
              (D) TOPOLOGY: Linear
106
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
108 Phe Thr Ser Ser Leu His Ser
109
       1
                       5
111 (2) INFORMATION FOR SEQ ID NO: 6:
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 9 amino acids
114
              (B) TYPE: Amino Acid
115
116
              (D) TOPOLOGY: Linear
118
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
120 Gln Gln Tyr Ser Thr Val Pro Trp Thr
123 (2) INFORMATION FOR SEQ ID NO: 7:
         (i) SEQUENCE CHARACTERISTICS:
125
              (A) LENGTH: 123 amino acids
126
127
              (B) TYPE: Amino Acid
128
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
132 Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
133
                                           10
135 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr
136
                                        · 25
                      20
138 Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
139
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING DATE: 10/15/2001 PATENT APPLICATION: US/08/908,469 TIME: 16:14:37

Input Set : A:\P1093p1.txt

```
141 Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
142
                      50
                                           55
144
     Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
145
                                           70
     Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
147
148
150
     Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
151
                      95
                                          100
153
     Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr Leu Val Thr
154
                                          115
                     110
                                                               120
    Val Ser Ser
156
159 (2) INFORMATION FOR SEQ ID NO: 8:
         (i) SEQUENCE CHARACTERISTICS:
162
              (A) LENGTH: 108 amino acids
163
              (B) TYPE: Amino Acid
              (D) TOPOLOGY: Linear
164
166
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
168
     Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
169
                       5
                                           10
171
     Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser
172
                      20
                                           25
174
     Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
175
177
    Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
178
                      50
                                           55
180
     Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
181
     Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
183
184
186
     Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
                      95
187
                                          100
    Ile Lys Arq
192 (2) INFORMATION FOR SEQ ID NO: 9:
         (i) SEQUENCE CHARACTERISTICS:
194
195
              (A) LENGTH: 123 amino acids
196
              (B) TYPE: Amino Acid
197
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
     Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly
201
202
       1
                       5
                                           10
                                                                15
     Glu Thr Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
204
205
                                           25
                      20
     Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
207
208
                      35
    Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
210
211
                      50
                                           55
213
    Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Glu Thr Ser
214
                      65
                                           70
216 Ala Ser Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp
```

RAW SEQUENCE LISTING DATE: 10/15/2001 PATENT APPLICATION: US/08/908,469 TIME: 16:14:37

Input Set : A:\P1093p1.txt

```
80 .
217
                                           85
219
     Thr Ala Thr Tyr Phe Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
                                          100
220
                      95
     Ser His Trp Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr
222
223
                                          115
225
    Val Ser Ser
228 (2) INFORMATION FOR SEQ ID NO: 10:
         (i) SEQUENCE CHARACTERISTICS:
230
231
              (A) LENGTH: 108 amino acids
232
              (B) TYPE: Amino Acid
233
              (D) TOPOLOGY: Linear
235
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
     Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu
237
238
       1
     Gly Asp Arg Val Ile Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser
240
241
243
     Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys
244
                                           40
                      35
246
    Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
247
                      50
                                           55
     Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
249
250
252
     Ser Asn Leu Glu Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln
253
                      80
                                           -85
     Tyr Ser Thr Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu
255
256
258 Ile Lys Arg
261 (2) INFORMATION FOR SEQ ID NO: 11:
263
         (i) SEQUENCE CHARACTERISTICS:
264
              (A) LENGTH: 113 amino acids
265
              (B) TYPE: Amino Acid
              (D) TOPOLOGY: Linear
266
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
268
270
     Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
                                           10
271
     Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
273
274
                                           25
276
     Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
277
279
     Glu Trp Val Ser Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
280
                      50
                                           55
     Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
282
                                           70
283
                      65
    Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
285
286
                      80
                                           85
     Thr Ala Val Tyr Tyr Cys Ala Arg Gly Phe Asp Tyr Trp Gly Gln
288
                                          100
                                                               105
289
                      95
291
     Gly Thr Leu Val Thr Val Ser Ser
292
                     110
```

RAW SEQUENCE LISTING DATE: 10/15/2001 PATENT APPLICATION: US/08/908,469 TIME: 16:14:37

Input Set : A:\Pl093pl.txt

```
294 (2) INFORMATION FOR SEQ ID NO: 12:
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 108 amino acids
297
298
              (B) TYPE: Amino Acid
299
              (D) TOPOLOGY: Linear
301
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
     Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
303
304
                                           10
    Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
306
307
                      20
                                           25
309
    Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
310
                      35
                                           40
312
   Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
313
                      50
                                           55
    Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
315
316
                                           70
318
    Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
                                           85
319
                      80
    Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
321
322
                      95
324
    Ile Lys Arg
327 (2) INFORMATION FOR SEQ ID NO: 13:
329
         (i) SEQUENCE CHARACTERISTICS:
330
              (A) LENGTH: 107 amino acids
331
              (B) TYPE: Amino Acid
332
              (D) TOPOLOGY: Linear
334
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
336
    Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
337
                       5
                                           10
       1
339
    Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser
340
                                           25
                      20
342
    Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
343
                      -35
                                           40
345
    Leu Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
346
                      50
                                           55
348
    Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
349
                                           70
    Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
351
352
                                           85
    Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
354
355
                      95
                                          100
357
    Ile Lys
360 (2) INFORMATION FOR SEQ ID NO: 14:
         (i) SEQUENCE CHARACTERISTICS:
362
363
              (A) LENGTH: 123 amino acids
364
              (B) TYPE: Amino Acid
365
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
367
    Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
```

VERIFICATION SUMMARY DATE: 10/15/2001 PATENT APPLICATION: US/08/908,469 TIME: 16:14:38

Input Set : A:\Pl093pl.txt

```
L:32 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:33 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:2469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119
L:2481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120
L:2496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:2508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:123
L:2544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125
L:2556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127
L:2592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127
L:2595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127
L:2607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127
L:2649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:130
L:2661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
```